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THOUGHTS

ON THE USE OF

MACHINES,

IN THE

Cotton Manufacture.

ADDRESSED

To the WORKING PEOPLE

In that MANUFACTURE,

AND TO

The POOR in general.

By a FRIEND of the POOR.

PRICE TWO-PENCE; or, 15s. a hundred to those who are disposed to give them away.

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BRITISH MUSEUM

THOUGHTS

On the USE of

MACHINES.

Fellow-Countrymen and Friends,

MEN of *all Ranks* in this Country are *equally* concerned in anſwering the queſtions, "Of what "real uſe are Machines in Trade, and particu-"larly in the Cotton Manufacture? Are they of any "advantage to tradeſmen, or to working people? Are they "of advantage to the one, and diſadvantage to the "other? Or are they hurtful to both?" At preſent, theſe queſtions are very ſerious and important, Much, very much indeed depends upon a *true anſwer*. But it requires great care, attention, and openneſs of mind to come at the *real truth*. I have taken ſome pains upon this ſubject, not to deceive myſelf, nor to miſlead others. *I am no tradeſman*, and therefore may be imagined likely to judge with *greater impartiality*, and *fewer prejudices*, than one concerned in trade. One thing more I will ſay of myſelf without fear or reſerve. I am, from the bottom of my heart, *a Friend to the Poor*. I wiſh to plead *their cauſe*, and to ſpeak in *their favour*. I feel tenderly for the *poor man* and his *family*. And, if my heart does not deceive me, I would do, I would ſuffer any thing for *their welfare*. Led by *no other principle*, but regard to the *Poor*, I now wiſh to enter into free and friendly converſation

with you, *my poor but eſteemed friends*, on the ſubject of our machines. And in order to do this to the *greateſt advantage*, I will firſt lay down ſome things neceſſary to *clear our way* to the point, and then endeavour to *anſwer the queſtion*, of the uſefulneſs or injuriouſneſs of machines for ſhortening labour, particularly in the Cotton Manufacture.

And the *firſt principle* I would lay down, is this: *The intereſts of the Poor in every country, and eſpecially in this, ought to be conſidered in the firſt place, and with our firſt attention.* The *Poor*, by whom I mean, the *working part* of the people, are the *ſtrength and riches* of every ſtate. In ſome countries, where *arbitrary power* prevails, they are no more conſidered than the *cattle*. They are the abſolute *property* of their *maſters*, and are *bought* and *ſold* along with the eſtate, on which they live. Thanks be to God! juſter and nobler ſentiments prevail in England. The Poor here are conſidered as *a part*, and *ought* to be conſidered, as the *principal part* of the nation. It is plain, they are the *moſt numerous* part. What would become of the rich, if there were *no poor* people to *till* their grounds, and *pay* their rents? And what would the tradeſman do, *without workmen* to manufacture his goods? The *intereſt of the Poor*, therefore, muſt, with every conſiderate man, be the *object* of his *firſt regard*. For my own part, as I paſs along our *public roads*, I cannot help feeling a *ſingular pleaſure*, from obſerving, that, in our late improvements, *ſo much attention* is paid to the *foot-paths*, and to the eaſe and comfort of thoſe, who walk upon them. I would have the *ſame ſpirit* carried into *trade in general*. If I am not much miſtaken, I have made all my enquiries, under the influence of *this principle*. If I have *any prejudices*, they are in *favour of the Poor*.

I would

I would obſerve,

2dly. That there is *not* ſo *great a difference* in the *real intereſts* of the *rich* and the *poor*, of *tradeſmen* and *workmen*, as ſome perſons imagine. Some perſons talk, as if there were *one intereſt* to a *landlord*, and *another* to his *tenant*; one to a *manufacturer*, and another to the *weaver*. But, in fact, they are *one and the ſame*. Whatever enables a tenant to pay a *better rent*, is for the *benefit* of his *landlord*; and if a workman can get handſomely by his labour, if he has *good work*, and *good wages*, it muſt be not only a *pleaſure*, but an *advantage* to his *maſter*. For the maſter could not *afford* thoſe wages, if his trade did not enable him to do it. And certainly, it is as much for the advantage of the *workman*, that *trade* ſhall be in ſo *flouriſhing a ſtate*, as to enable his maſter to provide him with *good work*, and *good wages*. The *benefit* therefore is *mutual*. Their *real intereſt* is the *ſame*. I fear, we have fallen into a miſtake, by ſuppoſing a *different* intereſt to the *employer*, and the *employed*. It is with *men* in ſociety, as it is with the parts of the human *body*. If one member ſuffer, all the reſt ſuffer with it. If the *Poor ſuffer* much, if they have little work, or little wages for their work, it muſt be, becauſe *trade* is in a *low and languiſhing* condition. And this the *maſter* will feel as ſenſibly as the *ſervant*. When trade is *briſk*, and the demand *good*, maſter-tradeſmen are ſure to behave *well* to their workmen, and to advance their *wages* to ſome proportion of their own profit. The workmen *very ſoon* feel their own importance. And they *will* not, they *ought* not to ſuffer themſelves to be oppreſſed, or ill-treated. From the *Prince*, therefore, to the *Peaſant*, through *all the orders* of the ſtate, there is but *one intereſt*. *Noblemen*, *Gentlemen*, *Clergymen*, *Tradeſmen*, *Farmers*, *Workmen*, all have *one common cauſe*, all muſt either *ſuffer*, or *rejoice together*.

3dly. The *Intereſt of Trade* is a very *large* and *difficult* ſubject. Trade is an *ocean*, with *ten thouſand rivers* branching from it; and each of theſe rivers *branches* out *again* into as many *leſſer channels*, which wind in *every direction*, and ſpread themſelves into almoſt every part and corner of the Globe. What an *amazing ſubject* is this for a man to *examine* and to *underſtand*, with any degree of exactneſs! What an *extent* of knowledge, of reading, of experience, and obſervation are *neceſſary*, to qualify a man to judge of its intereſt or injury, with any degree of *truth* or *probability!* And yet there is hardly any ſubject, on which perſons *fancy themſelves* ſo able to judge, with ſo *little furniture*. But it is here, as in every thing elſe. *Thoſe perſons judge moſt raſhly and poſitively, who have the leaſt Knowledge. Before* a man can *pretend* to decide *abſolutely*, upon trade in general, or upon any particular *branch* of trade, or upon any *alteration* in any particular branch, *how much* is it *neceſſary* for him to *know!* How much of Commerce *in general*, of the demand of *different countries*, of the *taſte* and *manners* of different nations, of the *articles* they uſe, the *prices* they give, the *channels* by which they are ſupplied, of *freight, cuſtoms, inſurance, &c. &c.?* And perhaps, after all, there are *ſome points*, which cannot be determined *beforehand*, by any reaſoning or knowledge, how juſt and extenſive ſoever,—they muſt be left to *time* and *experience* to fix their real value. For inſtance. Who could have preſumed to foretel *all the effects*, which would follow the invention of a *ſingle machine*, a *printing preſs!* Before that time, *books* were all *written* on paper or parchment. A book was then of *prodigious price*. Great numbers of hands were employed in *writing* them out, and yet but *very few* could be procured. The *Poor* in general, and even perſons of higher rank *could not read*. Ignorance and Popery, and Superſtition *almoſt univerſally* prevailed.

How

How much has Knowledge been promoted and diſperſed by this *ſingle invention?* And what effects have followed? How has *every art* of human life felt its influence? But who could have foreſeen a *thouſandth part* of this, at *that time?* It is then a very *great* and *deep* ſubject; much *too great* and *too deep*, for perſons, in general, to decide upon it, as many do, *at once*, and with *full confidence*. Deep thought, long ſtudy, extenſive reading, and large experience are neceſſary to a *true judgment*. Should not this make us *modeſt* and *diffident*?

4thly. It is the uſe of *Machines*, which chiefly diſtinguiſhes men in *ſociety* from men in a *ſavage ſtate*. Some have thought it no bad deſcription of a human being, that he is a *tool-making*, or a *machine-making* animal. What are the moſt *common inſtruments*, or *furniture* of our houſes, but *machines to ſhorten labour?* What is an *ax*, a *hammer*, a *ſaw*, a *pair of bellows*, but *machines* for this end? A Loom is a *very uſeful machine*, for joining the weft to the warp. In *former times*, this was done much more with the *fingers*, and conſequently was a much more *difficult* and *tedious* buſineſs, than it is *now*. Our looms have been improving continually in ſimplicity, uſefulneſs, and conveniency. *Every age* has been adding *ſome little new* invention to them. The *Fly Shuttle*, invented a few years ago, has been found, by *thouſands*, to be a moſt *excellent*, and *happy* diſcovery. A Corn-Mill is a very complex machine. If we muſt go upon the principle of having *no machines*, we muſt *pull them all down*, and bruiſe our corn in *Mortars*. —What do I ſay? The *Mortar and Peſtle* are *machines* for ſhortening labour. We muſt cruſh our corn *between two ſtones*, or beat out the flour with *ſticks*. What a curious, beautiful, and uſeful machine is a *Clock* or *Watch?* Where does the ingenuity of man appear to greater advantage?

How curious and how uſeful is a Stocking-Loom, ſuch as is uſed at *Nottingham*, and the Dutch Loom, or Swivel-Loom, uſed at *Mancheſter*? Take a *Spinning Wheel*, with *one Spindle*. It is a *machine* to help labour; and was conſidered, for many years, as the *higheſt point*, to which human art could go. The late improvements, however, have now made it almoſt uſeleſs. Thus does one age riſe above another: ſo that if a weaver or tradeſman, who lived a *hundred years ago*, in this country, could pay us a viſit *now*, it is probable, he would *hardly know* the manufacture again. Moſt certainly he would ſay, it is *aſtoniſhingly improved and extended*. And *all this* is owing, under heaven, to our *machines* in ſpinning, warping, weaving, dreſſing dying, &c. &c.

5thly, But it muſt be acknowledged, that all improvements in trade by machines do, *at firſt*, produce *ſome difficulties* to ſome particular perſons. How many writers and copiers of books were thrown out of employment, or obliged to change it, by the introduction of printing preſſes? About ten years ago, when the *Spinning Jennies* came up, *old perſons*, *children*, and thoſe who could not *eaſily learn* to uſe the *new* machines, did ſuffer, for *a while*; till families had learned to play into one another's hands, by each taking a different kind of work. But the *general benefit*, which was received from the machines, *very ſoon* ſilenced all objections. And every ſenſible man *now* looks upon them with *gratitude and approbation*. It is probable, this will be the caſe in *all new inventions*. And thoſe who *ſuffer*, will *complain*. But, when ſo many *more* receive *advantage*, it would be injuſtice, and cruelty to the *people at large*, to deprive *them* of this *advantage*, for the ſake of a *few*. It is indeed painful to think, that *any* ſhould ſuffer. But I am happy in hoping, this *cannot* be for *any long time*. For,

6thly.

6thly, *Trade, in general, will ſoon find its own level.* Thoſe who were thrown out of their *old employments*, will find, or learn *new ones*. Thoſe, who now get *leſs* by their labour, will be aiming at the *more profitable* branches. Thoſe who, by ſtriking *early* into *new inventions*, get a *diſproportionate gain*, will ſoon find ſo *many rivals*, that they muſt *ſink* their *terms*, and reduce their profits. The *firſt* Corn Mill, probably, raiſed the fortune of the *Inventor*, or, as is more commonly the caſe, of the *ſecond owner*. For ſometime, the printing preſs muſt bring in *enormous advantage*. But very ſoon, the wages for grinding, and printing came very much to a level with the price of labour *in general*. And it is very fit, this ſhould be the caſe: that thoſe, who employ their *ingenuity* for the benefit of *mankind*, and thoſe, who have *ſpirit* to riſk, and *perſeverance* to carry on a new plan, ſhall reap the advantage of it. If it were not for *this encouragement*, all uſeful *ſchemes* muſt *die* in their birth. Let then the *ingenuity*, which contrives; let the *perſeverance*, which finiſhes; let the *ſpirit*, which adventures, meet with *due reward* of *gain* and *honour*. *Extraordinary* gains cannot laſt *long*. This will, probably, very ſoon be the caſe, with our printing works for Cottons. The bringing down thoſe works, from London to this Country, has been of very great advantage. Thoſe, who *firſt* engaged in them, will, it is hoped, find themſelves *well repaid*. But very ſoon it will come to the profits of a *fixed and regular trade*. And thoſe, who now *ſuffer*, at a diſtance, by the introduction of this manufacture amongſt us, will, we hope, ſtrike into ſome other way, and forget their preſent ſufferings.

7thly, There is among people, in general, *a diſpoſition to be alarmed*, at any *new* diſcoveries of this nature.—Public habits of thinking or acting are not ſoon altered. Nothing is ſo much dreaded as *Innovation*. Upon the invention of the

the *Fly Shuttle*, by Mr. Kay of Bury, a few years ago, *all the country* was in an *uproar*. His life was threatened, and was, I believe, in the utmoſt danger. He eſcaped with *great difficulty*, as I have been informed, ſewed up in a Cotton bag; and went to France, where he was received with *every encouragement*, where he introduced his invention, and where he ſtill lives, in credit and affluence. How different his treatment *at home!* And what has been the effect! To *ſuppreſs* the Fly-Shuttle! No. Quite the contrary. It is almoſt univerſally in uſe amongſt us. So that all the effect of that alarm was, to *baniſh an uſeful citizen*, for a noble diſcovery; to *ſend it abroad* to our enemies and rivals; and, after all, to *adopt it ourſelves!* And now, after the trial of ſo many years, I verily believe, there would be a *greater uproar*, if there were any attempt to *take it from us*. So changeable is the human mind! But *here* lies the difference—*Then*, they judged *before trial*—*Now*, from *fact* and *experience*. And fact and experience have taught them, that all their *former fears* from the Fly-Shuttle were mere *bug bears*; for now they *feel* its value and uſefulneſs. There was the ſame alarm among the workmen in the Small-ware Manufactory, about twenty years ago, on the introduction of the Swivel-Loom. What rioting and alarm was there, in this Country, about ten years ago, upon the invention of the *Spinning Jennies?* Many people foreboded the *moſt dreadful* conſequences from them. The *common cry* was, that they would take the *bread* from the *Poor*, and throw them out of employment. Upon this, a mob aroſe, burnt what machines they could diſcover, and carried about their fragments *in triumph*. The perſons, who did this, *thought* they were doing *ſervice* to the country, by deſtroying thoſe *terrible engines*, which were about to empoveriſh, and ruin the land. This flame however *ſoon* died away. A better ſpirit ſucceeded. The Jennies made their

way

way *ſilently*, by their own merit. *Thouſands of families* have now, for many years, had reaſon to *thank God, that* ever they were invented.

Many perſons are *now again alarmed*, upon account of the *large Machines*, which have been ſet up, in different places, for ſpinning Cotton. Let us therefore proceed to enquire, what effects they *may probably have* upon our Trade, in future. The apprehenſions of ſome perſons run *high indeed*. They ſeem almoſt to expect, that the whole cotton manufacture will be performed by machines, and aſk, what *then* will become of our *Poor?*—In anſwer to this, it may be ſaid, That perhaps no perſon, even the wiſeſt among us, can exactly foretell *all the effects*, the machines may produce. Who durſt have ſaid, ten years ago, that the Jennies would have *juſt thoſe* conſequences, and *none others*, which have followed from them? Trade is of ſo *large* and *complicated* a nature, there is ſo near a *connection* between different Trades, one diſcovery leads on to ſo many *more*, one *cauſe* produces ſo many *unthought of effects*, that, very poſſibly, conſequences, which no man could ever have *imagined*, will follow. But I am firmly perſuaded, theſe effects will be *very beneficial* to the Poor, and to all orders among us. For let us conſider, what our machines *have done already*.—It will give us the *beſt preſumption*, of what they will do in *future*. And here, I will not attempt to conſider the point, like a tradeſman. I will not enquire into the nature and quality of the *warps* or *weft*, produced by the machines. I will take the ſubject in a *larger* point of view, by conſidering, what *have been* the *general effects* of our improvements, as to the ſtate of our *trade*, and the condition of our *Poor*. Though I am *no tradeſman*, I can judge upon *theſe* ſubjects, as well as *they*. —And ſo may the *pooreſt weaver* among us. All that is neceſſary is, *honeſty*, and *fairneſs of mind*. And

And the firſt effect of our machines has certainly been, to *produce* and *continue a flouriſhing trade*, ever ſince they were invented. Notwithſtanding every diſcouragement, and whilſt almoſt every *other* manufacture in the kingdom has been in a *languiſhing condition*, *our's* has gone well. I believe, it may be ſaid, that *never* did trade keep us ſo *well*, and for ſo *long a time* together, ſince any manufacturer, now alive, can remember. And to what can we aſcribe this, but, *under God*, to our machines? Formerly, there uſed to be, in every four or five years, a ſtagnation; and then, a briſker demand. The reaſon was this. When trade *went well*, goods were not made ſo carefully, either as to the *ſpinning*, or *weaving*. Hence, the demand was ſoon leſſened; till, having recovered their quality again, they again made their way at foreign markets. But, *for ten years*, with very little intermiſſion, the *demand has been good, and equal*. There have been, in general, good *work*, and handſome *wages*. Surely *every man* among us, of *common honeſty*, will acknowledge this. We ought to do *more*. We ought fervently to *give thanks* to Almighty God, for his goodneſs to us, in this reſpect. If we look *abroad*, into *other Counties*, we ſhall ſee the reaſonableneſs and propriety of doing it, in the ſtrongeſt light. Have we not, for ſome years, had the *advantage over every other* manufacture in the kingdom, except thoſe, immediately ariſing from the war? Theſe indeed, ſuch as the manufactures of muſquets, ſail-cloth, gunpowder, &c. may be expected to flouriſh *now*.—This is *their* market. But, in general, the regular and ſtaple manufactures of the nation, the *Woollens*, *Crapes*, *Tin*, *Iron*, &c. have been in a *low condition*. Yet *ours* has gone on to *flouriſh*, notwithſtanding the ſtoppage of our former and principal markets; notwithſtanding the eager rivalſhip of our enemies; yea, in ſpite of thoſe difficulties, which, at any *other* time, and in any

other

other circumſtances, would probably have almoſt deſtroyed it. This is a *plain* fact. There is no arguing againſt it. No man ſurely *dares deny it.* There are a *million* of witneſſes to prove it. The *whole nation* has obſerved it with *wonder.*

In fact, the cotton manufacture is now almoſt *a new trade.* The fabrick, the quality of the goods we make, is amazingly *changed.* How many *new kinds of cloth* are made, in very great quantities, which could *not poſſibly, have been made,* at leaſt in any quantity, or ſo cheap as to ſell, without our *machines?* Would it have been poſſible to bring to market ſo many cotton warps, and goods made with them, ſuch as *petticoats, cotton broads,* &c. &c. without our Jennies, and even without our *larger* machines? Could theſe have been ſold ſo *low,* if we could have made them? Conſequently, could we have had ſo *many cuſtomers* for them? The *Callicoes,* for inſtance, have been *almoſt entirely produced* by, and now entirely *depend upon* our machines. Without thoſe machines, they could not be made in any quantity, or to any advantage. In reality, our machines have created a *new trade.* They have improved the *kinds,* the *quality,* and the *character* of our goods, and have opened *new markets.* By enabling us to make *new kinds of goods, and old* kinds in a *better manner,* and to afford theſe on *cheaper terms,* they have enabled us to invite the cuſtom of *ſtrangers,* to underſell our *rivals,* to open *new channels of trade,* and, in one word, to keep up a *flouriſhing* manufacture, under every poſſible *inconvenience.* And all this has been done, when many of the *Poor thought* they were going to *loſe* their employment. And it has been done, *under Providence,* by *thoſe very machines,* of which they were ſo dreadfully afraid. What a piece of *madneſs* indeed would it have been, to have *deſtroyed* them! And yet, how many heartily wiſhed to have done it! And ſome, I fear, *ſtill* wiſh it to be done.

And

And it deſerves to be noted here, that our machines have *encreaſed the labour* of the poor, inſtead of *diminiſhing* it. Formerly, *cotton warps* were *little uſed*. The warps were chiefly of *linen*, and conſequently *made abroad*. But how many cotton warps are uſed now among us, *and all made at home*! What an *encreaſe* is this, of the employment of the *working people*! How many *new hands* are now engaged in this buſineſs! All this is ſo much *clear gain* to our own manufacture! So much *money* kept at *home* which uſed to go *abroad!* So much *labour* performed by *ourſelves*, which uſed to be performed *by others!*

In proof of this, how many men have left their looms, and become ſpinners? The reaſon was, becauſe they could get more by ſpinning, than by weaving. What a prodigious difference have our machines made in the gains of the *females* in a *family?* Formerly, the chief ſupport of a poor family aroſe from the *loom*. A *wife* could get comparatively but *little*, on her *ſingle ſpindle*. But, for ſome years, a good *ſpinner* has been able to get as much, or more than a *weaver*. For this reaſon, many *weavers* have become *ſpinners*. And, by this means, ſuch quantities of *cotton warps*, *twiſt*, *weft*, &c. have been poured into the country, that our *trade* has taken a *new turn*. All the ſpinners in the country could not poſſibly have produced ſo much of theſe, as are *now* wanted, in a ſmall part of our manufacture. If it were true, that the *weaver* gets *leſs*, yet, as his *wife* gets *more*, his *family* does not ſuffer. But the fact is, that the *gains* of an induſtrious *family* have been, upon an average, *much greater*, than they were before theſe inventions.

To ſum up what has been ſaid, on this head, of what our *machines* have *already done*.—They have *continued*, *improved*

proved, and *extended* our trade, in ſpite of *every diſcouragement*.—They have cauſed *more* of the manufacture to be performed *at home*, and *among ourſelves*.—They have *increaſed* the *gains* of the *females* in a family, and of the *family in general*.—And they have created *a new trade*, and opened *new markets*. Is not this *ſufficient* to recommend them to every well wiſher to his country, to every *friend of the poor?* Surely no man will venture to ſay, this is not the *true ſtate* of the caſe. I *cannot* be miſtaken, as to theſe *general facts*. They are clear as the mid-day ſun. No man, that values his *conſcience* or his *character*, can deny them. Every *religious mind* views and adores the *Providence of God*, which has thus appeared for us, by providing ſufficient *work* for the poor, *and wages* for their work.

But what will be the effect of the *new and large machines?* I have before ſaid, perhaps no man can abſolutely tell, But, I promiſe myſelf, they will be *good, and great*. I do this, the more chearfully, relying upon our *paſt* experience. It is our beſt rule of judgement.

Some perſons are frightened with imaginary terrors. They expect ſo much to be done by *wood* and *water*, that *hands* will be of little uſe. It is a *vain terror*. The *machines* will be ſo far from *diminiſhing*, that they will *encreaſe* the labour of the working people. It is probable, indeed, they may, in ſome degree, *change the kind of labour*, in ſome perſons. They may, perhaps, ſend ſome *ſpinners* back again to their *looms*. They may cauſe more *children* and *girls* to be ſet down to weaving, than at preſent. This is now the caſe in the *check buſineſs*. And therefore can be no *hardſhip* in the cotton, provided the gains of the family are not leſſened. Probably, they may encreaſe the number of *looms*, and leſſen that of *Jennies*. More goods will therefore be made.

made. Indeed more are *wanted* now, than can be made, by the hands employed. How will this encreaſe the *labour dependant upon* the manufacture? How many *more pieces* will there be to *dreſs*, to *bleach*, to *dye*, to *calendar*? How many *more hands* will be neceſſary, in each of theſe employments? This change of employment may, for the preſent, produce ſome little *difficulty*, in *particular caſes*. And this is the principal inconvenience I appprehend, from the machines. But this is *comparatively nothing*, when ſet againſt the *general benefit*, and will be *ſoon over*. It is no more, than has *always* attended *every improvement*, and it is a ſacrifice, we ought to make *chearfully*, to the *common good*.

When I look upon our machines, with a regard to the *Poor*, and as *their friend, and well wiſher*, my heart glows with gratitude and pleaſure on their account, in the full hope, that, by means of them, our manufactures will *continue*, and be *extended* and *improved*, from age to age. *Perhaps*, e'er long, our manufacture may be *chiefly of cotton*. *Linen* may be almoſt *laid aſide*. Suppoſe, for inſtance, *common Jeans* could be brought to market, made with *cotton warps*. What a ſale might we expect! *Such goods* would have the demand of *all the world*. Nor is this at all unlikely to be the caſe, in ſome future time. Already, cotton yarn has been offered to ſale, as I am very credibly informed, *almoſt*, if not *entirely* as cheap, as linen yarn, of the *ſame length*. *Germany* and *Ireland* then *have* reaſon to be alarmed at our machines. *Their* yarn manufactures may ſuffer ſeverely. But ſurely this will be the higheſt advantage to *us*, by encreaſing the quantity of *labour* amongſt ourſelves, and keeping ſo much *money* at home. *Perhaps*, by new improvements, we may vie with the *Eaſt-India goods* in fineneſs and beauty. And then,—what a proſpect would open upon us! But you ſay, all this is a mere

perhaps

perhaps. It is ſo. And I only offer it as ſuch. But, I aſk, is it more *unlikely*, than our *preſent* improvements were, *twenty years ago*? I believe not. Some tradeſmen thought, the cotton manufacture at its *higheſt pitch then*. It was *then* but in its *infancy*. *Perhaps* it is ſo *yet*. Human ingenuity, when ſpurred on by proper rewards, *may leave* whatever has been done *already*, at a vaſt diſtance. We may have goods brought to market *cheaper*, *finer*, *better*.—The *neceſſary* conſequence of this will be, the demand will *encreaſe*, and *all the world become our cuſtomers*. If we can *underſell* all the world, we may have the *cuſtom* of all the world. Merchants are alike, all the world over. They will go to the *cheapeſt market*. What a pleaſing thought is this!—But in order to this it is neceſſary to *encourage* our machines, and to keep them, as much as poſſible, to *ourſelves*.

Alas! this *cannot* now be done ſo effectually as might be wiſhed. We have driven ſome ingenious men from us, by *hard uſage*. Others go for the proſpect of *gain*. Our enemies have already gotten *ſome* of our machines. If we do not encourage them, they will get *all the reſt*. They will uſe them, if *we* will not. *They* have not *our prejudices*, but are ready to receive them with open arms. They have ſeen what the machines have *done for us*, and, no wonder, they wiſh to *get them themſelves*. And ſhall we then drive away our *beſt friends!* Shall we then *oblige* and *enrich* our *rivals*, our *enemies*? What folly! what madneſs!

Let us for a moment *ſuppoſe*, that *machines* in general were *hurtful* to trade, and to the poor, and, that it were much to be *wiſhed*, they had never been *invented*. Yet we ought to conſider, *is it poſſible to put them down?* Becauſe, if it were *not poſſible*, it would be our wiſdom, not to *attempt* it, but to draw as much *good* from them *as we can*. If they were *evils*,

evils, yet they are now *neceſſary evils*. If it had been *better*, they had *never been invented*; yet, as they *are invented*, the queſtion is, what ſhall we *do with them?* Shall we *refuſe* them ourſelves, and ſend them to *other* nations? That would plainly be our *abſolute ruin*. We ſhall then loſe our *market*, and our *employment*. Can he poſſibly be a *friend of the poor*, who endeavours, or wiſhes to do this?.

It is indeed, in the opinion of many, an uncomfortable reflection, that our trade lies now much more *open* to the deſigns of *other nations*, than ever it did before. Machines, ſay they, have had this *bad tendency*. They have made it a much more *eaſy* matter, to take it from us, if we are ſo ſimple as to give them leave. Whilſt a manufacture lies chiefly in the *ingenuity and dexterity* of the hands employed, and this dexterity depends upon *education and early habit*, you cannot take *it* away, without taking away the *people*. But *machines* belong to no *place* or country. They are *commoners of nature*. They will work as well in *France*, or *Spain*, as in *England*: and as well in *one part* of England, as another. What then ſhall we do? Is it not our wiſdom to make the *beſt of them*, we poſſibly can, to *protect* and *encourage* them, to give the inventers and workers of them no reaſon to *leave us*, but every reaſon to *go on*, and add to their improvements?

I have known ſome perſons ſtaggered by this argument. There is, ſay they, *a certain quantity* of labour to be performed. This uſed to be performed by *hands*, without machines, or, with very *little* help from them. But if now machines perform a *larger ſhare* than before, ſuppoſe one *fourth part*, *ſo many hands*, as are neceſſary to work that fourth part, will be *thrown out of work*, or ſuffer in their wages. The principle itſelf is *falſe*. There is not a preciſe limited *quantity* of labour, *beyond* which there is no demand

mand. Trade is not hemmed in by *great walls*, beyond which it cannot go. By bringing our goods *cheaper* and *better* to market, we open *new markets*, we get *new cuſtomers*, we encreaſe the quantity of labour neceſſary to ſupply theſe, and thus we are encouraged to puſh on, in hope of *ſtill new* advantages. *A cheap market will always be full of cuſtomers.* Men will croſs land and ſea to go thither. *Improve* therefore, and *cheapen* your commodities, and you offer a bait to *every tradeſmen* in the world. Nor can I perſuade myſelf, that *machines can ever poſſibly be carried too far.* Carry them as far as you will, you encreaſe the *demand*, and conſequently encreaſe the *labour* of the poor. You may indeed alter the *kinds* of labour: We have already ſhewn how the Jennies have done this, in ſome degree, by turning ſo many weavers into ſpinners. But *labour* will *always* be *neceſſary*. And whilſt there is a *good demand*, *wages* will be good. If it were poſſible for us, by improvements in machines, (which, however, never will be the caſe) to *underſell* all the world, and to card, and rove, and ſpin, and *weave too* by machines, we ſhould then have to *warp*, to *dreſs*, to *dye*, to *bleach*, to *cut*, to *print*, to *calendar* for all the world. And would not all this afford *ſufficient employment* for our poor?

But this is all idle fancy. If it were *poſſible*, it would not *hurt* us. But People are frightened by *their own imaginations*. The experience of all *paſt ages* is, that machines have *ever done good*—And the true concluſion is, that they will *continue* to do good, *more and more*, if we will uſe and encourage them, as we ought.

But *what are we doing*? What mean thoſe *riotings* and *tumults*, which we ſaw a few months ago? What mean the *petitions* to parliament, to *ſuppreſs* or *tax* the machines?

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The wiſdom of parliament will not certainly regard ſuch *petitions*. We might juſt as wiſely aſk, to have our *hands* lopped off, or our *throats* cut. I confeſs, I am *grieved and ſhocked* at that ſpirit of complaint, which appears among us. It is the temper of many to *complain always*; tho', if I judge right, there *never* was a time, when there was *leſs reaſon* for it, *in general*. I do, however, foreſee *a time*, when we *ſhall* feel a change, not owing to our *machines*, but to a very different cauſe. It ſurely is not owing to *them*, that land ſinks in value, and that the value of *money* is encreaſed; becauſe that is the caſe, thro' all England, and *moſt* of all, where there are *no manufactures*. Proviſions are now greatly fallen in price. Upon the principle mentioned before, that trade will find its own level, there *muſt* and *will* always be a level between the price of *labour*, and the price of *proviſions*. But, at preſent, the balance is greatly on the *ſide* of the *poor working man*. He has his *former* price of *labour*, and yet, goes to lay it out at a much *lower market*. His ſhilling *now* will buy as much, as 15 or 18 pence would have done, *two years ago*. This then is certainly the poor man's time. *Now* the advantage evidently lies *with him*. Alas! I fear, *too few* will be wiſe enough to improve it. Many had rather carry their money to the *Alehouſe*. Their *families* are little better for their gains. They can afford to ſpend, to ſpend largely *there*: and, when their money is gone, complain of *machines*, of *tradeſmen*, of any body, every body, but *themſelves*. We have not improved our day of mercy as we ought. Providence may juſtly take it from us. And, if Providence be beginning to contend with us, as God generally puniſhes us by *our own means*, he will do it, by *permitting* the general ſpirit of phrenzy and folly among us to *go on*, to our ruin. We ſhall deſtroy our machines—

we

we ſhall drive away our trade—and then, at laſt—when *it is too late*, ſee and lament our madneſs.

What then *ought* we to do? Our *duty*, our *intereſt* are plain and clear. My Poor, but valued friends, let us be *thankful* to God for our preſent mercies, and endeavour to *improve* them, by contentment and honeſt induſtry. Let us look *abroad*, at the condition of *others*, that we may ſet a proper value upon our preſent bleſſings. Let us lead *quiet* and *peaceable* lives, in all godlineſs and honeſty, in ſobriety and diligence, that thus our tranquility may be lengthened out. This is the advice of him, who can, with truth and ſatisfaction, ſubſcribe himſelf,

A Friend of the Poor.